



**Innovent**  
*Air Handling Equipment*

BUILT **TO ORDER.**  
BUILT **FOR EFFICIENCY.**  
BUILT **TO LAST.**





*Listening carefully to your  
unique air handling needs  
and crafting innovative,  
efficient and reliable solutions  
is our basis for design.*

## BUILT TO ORDER.

### Engineering Expertise

Frustrated with off-the-shelf, one-model-fits-all air handling equipment? Then, welcome to Innovent. Our experienced engineering staff and sales representatives know that no two buildings are alike, and we'll work closely with you to design a customized air handling system that will meet your project's unique requirements and exceed your expectations. There's no need to compromise on your vision or redesign mechanical room space when you work with Innovent. Our engineers and sales representatives are experts in product design, high-percentage outdoor air systems, packaged refrigeration, dehumidification, control systems, heat transfer and energy recovery. Since 1981, we've been engineering energy-efficient, customized air handling solutions to meet the critical performance, capacity and air-quality requirements of a wide range of facilities including education, health care, industrial, government, hospitality, recreational, research and retail. Experience the added value we can bring to your next new construction or renovation project. Make Innovent your basis of design for any of these custom air handling solutions:

- Custom Air Handlers (**C-Series**)
- Energy Recovery (**E-Series**)
- Desiccant Dehumidification (**D-Series**)
- Pool Dehumidification (**P-Series**)



# BUILT FOR EFFICIENCY.

## Green Technologies

No matter how complex or challenging your project is, we can incorporate the ideal energy recovery device, provide optimized refrigeration components, and utilize efficient compressors and fans for a highly efficient customized unit. Our products deliver precise temperature and humidity control, assist in LEED accreditation and green building goals, and provide economical indoor air quality for buildings of all sizes and types.

### 1 Energy Recovery

Incorporate sensible or enthalpic plates, energy wheels, run-around coils or heat pipes from multiple manufacturers to meet your exact needs. Innovent can review first cost, operating cost and operational concerns to help select the most appropriate energy recovery method for your project.



### 2 Filtration Options

Utilize pleated, cartridge, bag, HEPA, carbon, or any type of filter for a simplified system and a single access location.

### 3 Fan Options

Direct drive fans with traditional VFD controllers or EC motors, in single or multiple fan arrangements



### 4 Heating Options

Indirect or direct fired gas, hot water, steam coils, IFB coils or electric heaters to meet your fuel type needs



### 5 Cooling Options

Chilled water to integrate with your chiller on site or DX coils for packaged or split refrigeration, direct or indirect evaporative coolers



### 6 Controls Options

Customized DDC controls with BMS interface can be provided on any Innovent unit, which allows for a fully functioning and factory-tested system prior to arrival at the job site.



### 7 Packaged Refrigeration

For precise load matching, Innovent designs and builds customized refrigeration sections, from 1 to 400 tons, in air-cooled, water-cooled, heat pump and evaporative condenser arrangements. Whether cooling down to 45 °F in a process application or to 55 °F in a comfort cooling application, our custom refrigeration design approach can meet your exact needs using fixed speed, digital or variable speed scrolls, or screw compressors.



# BUILT TO LAST.

## Proven Durability

Sufficient service access and robust, standard or enhanced casing construction options help properly maintained units last well over 30 years. An extensive variety of internal components address any space, performance, application or quality concerns you may have.

### 8 Casing Construction Options

Custom casing aspect ratios allow us to build a unit of any size up to 250,000 cfm. Our engineers can customize the arrangement to meet your stringent design requirements, whether you need a horizontal airflow configuration or a completely vertical unit. We can build units in multiple sections or completely “knocked-down” for easier installations.

### 9 Duct Connections

Reduce duct work and pressure drops by defining exact duct connection locations in the bottom, ends, sides or top.

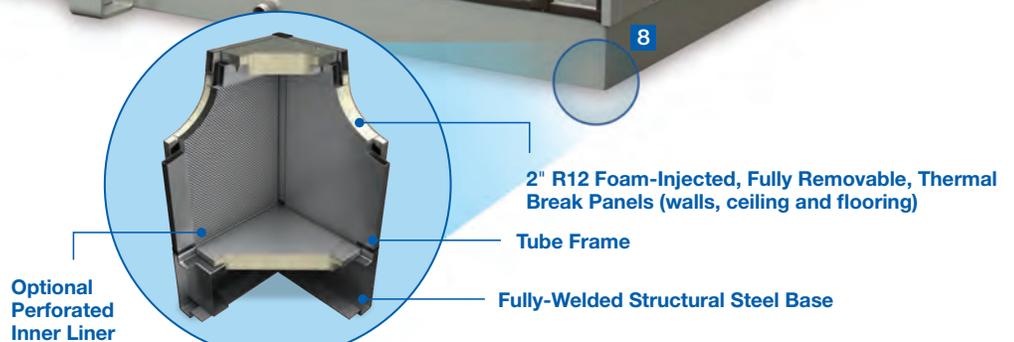
### 10 Serviceability

Full service access to all internal components requiring routine maintenance



### Enhanced Casing Options

- 4" foam-injected walls
- All aluminum, stainless steel or coated inner and outer wall construction
- Fully-welded wash-down flooring
- Tread plate flooring
- Custom color-matched exterior



**Standard Casing**



## UNLIMITED POSSIBILITIES

### C-Series

**Custom engineered systems to deliver precision control in critical environments.**

Meeting unique challenges with cost-effective solutions has made Innovent an industry leader in the design of fully custom air handling systems for critical environments. Our engineers and sales representatives work closely with you to evaluate your specific heating, cooling and air-quality requirements and then custom design a one-of-a-kind, energy-efficient, dependable system to handle up to 250,000 cfm.

Options include 100-percent outdoor air, gas heating, evaporative cooling, chilled-water and DX cooling, packaged refrigeration, electric heat, all-aluminum housings or other special casing construction, sectionalized equipment, “knock-down” field-assembled units, and direct-match replacement designs, including existing multizone units. Factory performance testing is available (casing leakage, panel deflection, airflow verification, basin leakage and sound verification) to ensure a premium quality unit is supplied and capable of delivering exactly what was specified.

- Custom design allows for unlimited flexibility in equipment layout, sizing, casing splits, and accessibility.
- Premium construction features such as 4" walls, fully welded wash-down floors, fan arrays, thermal break construction, and more.
- Capacities from 250 cfm to 250,000 cfm and up to 400-ton packaged refrigeration systems.



## Applications

- Hospitals
- Universities
- Labs
- Pharmaceutical
- Museums
- Wastewater Treatment Plants
- Retail



# ENERGY RECOVERY WITHOUT COMPROMISE

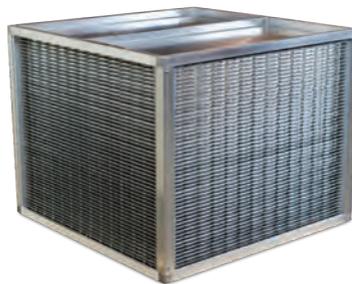
## E-Series

Maximize energy transfer between separate air streams with tremendous design flexibility.

Innovent E-Series units recapture energy from air leaving the building and transfer it to fresh incoming air. Tempering incoming air through energy recovery minimizes operating costs by reducing equipment cooling and heating load requirements. These systems provide effective energy recovery in both heating and cooling seasons.

Innovent offers the industry's most diverse portfolio of energy recovery options, including ultra-efficient enthalpy wheels, sensible or enthalpic flat plate heat exchangers, heat pipes and run-around coils. Whether your design driver is lowest first cost, lowest operating cost, or lowest maintenance cost, Innovent has the right energy recovery solution for you.

- Multiple energy recovery options and flexible cabinet designs are available to ensure optimal energy recovery for your building.
- Units can include single or dual “wrap-around” energy recovery components to reduce the cooling load and provide free reheat, typically used in dedicated outdoor air systems.



## Applications

- Schools
- Casinos
- Labs
- Industrial Processes





## PRECISE LOW HUMIDITY CONTROL

### D-Series

Using high temp, low temp, or passive regeneration desiccant technology.

For spaces that need to be maintained at low humidities and tight tolerances beyond the capabilities of typical air handling equipment, count on Innovent's D-Series units. These units deliver extra dry air to maintain spaces below 50% relative humidity, creating healthy and controlled environments for occupants in hospitals, clean rooms and research facilities. D-Series units also maintain controlled environments for preservation purposes such as museums, archive storage and ice rinks.

Our nonpatented approach provides design flexibility, allowing engineers to specify a nonproprietary system. Available options include direct or indirect fired gas, hot water, or steam heating; chilled water or DX cooling; custom packaged refrigeration; and integrated, factory-wired DDC controls, designed and built in-house, with single-point wiring for easy installation.

- Spaces can be maintained from 5% to 50% relative humidity using high temp, low temp, or passive regeneration methods for reactivation of the desiccant wheel.
- Nonproprietary approach lets consulting engineers select the best system based on the specific space needs and keep the project within budget requirements.



## Applications

- Ice Rinks
- Archive Storage
- Clinical and Surgical Rooms
- Industrial Processes



# HEALTHY

## POOL DEHUMIDIFICATION

### P-Series

Delivering high levels of outdoor air for healthier, more comfortable pool environments.

Innovent's P-Series products dehumidify indoor pool and waterpark spaces the natural way — using large amounts of outdoor air. Not only does this approach deliver swimmer and spectator comfort, it improves air quality and minimizes corrosion by removing greater amounts of chloramines from the space. The use of outdoor air as the primary form of dehumidification also dramatically reduces the annual hours where mechanical dehumidification is required, lowering the operating costs of the facility.

Natural dehumidification is done efficiently in the P-Series through the use of an all-aluminum, air-to-air, sensible heat exchanger. During most of the operating year, energy is transferred from the exhaust air to the outdoor air to reduce the heating requirements of the space.

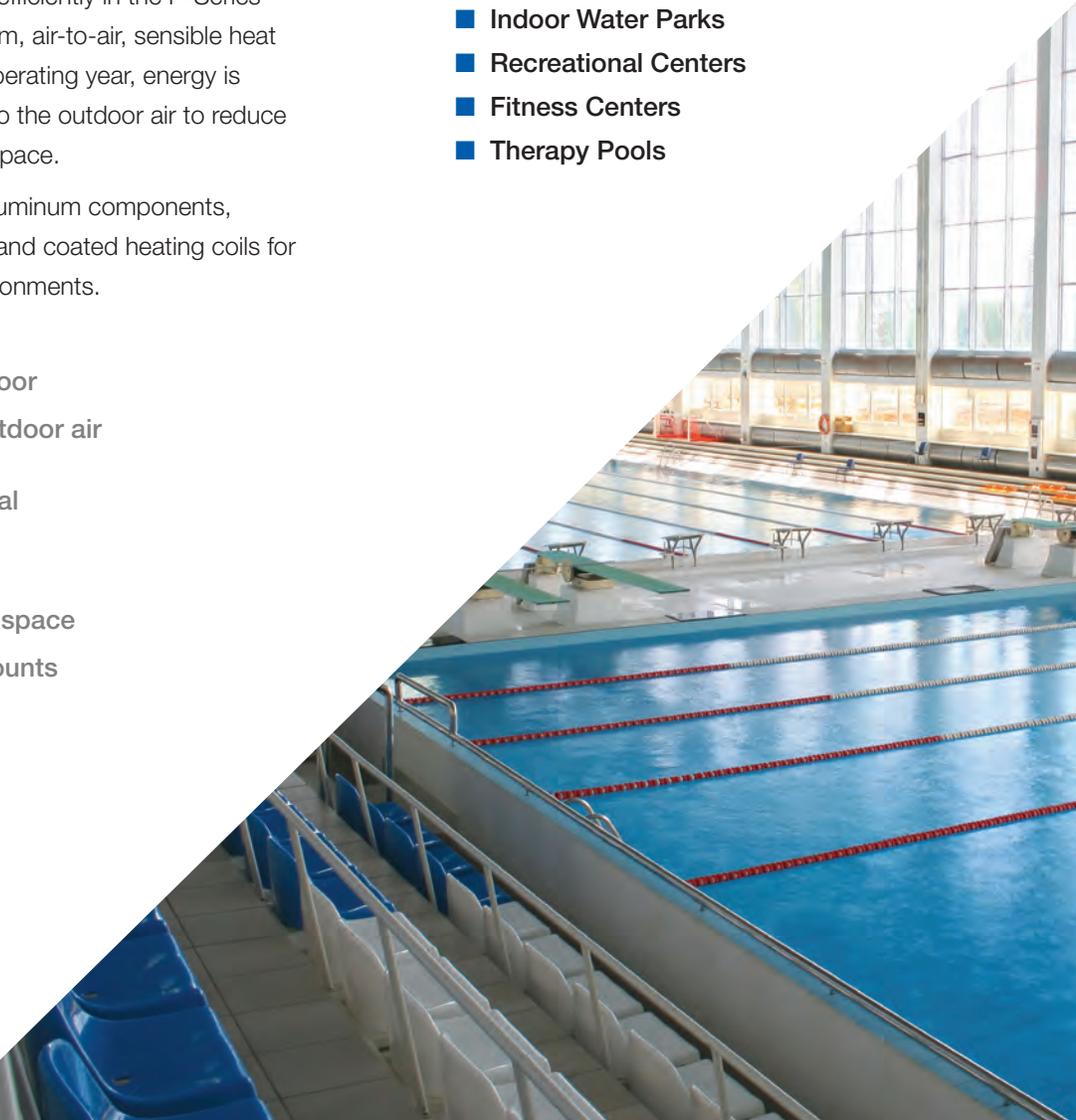
All P-Series units are built with aluminum components, aluminum foam-injected panels, and coated heating coils for years of service in corrosive environments.

- Naturally dehumidifies indoor spaces with 20% -50% outdoor air
- Greatly reduces mechanical dehumidification loads
- Improves air quality in the space by exhausting greater amounts of chloramines



## Applications

- Competition Pools
- Indoor Water Parks
- Recreational Centers
- Fitness Centers
- Therapy Pools



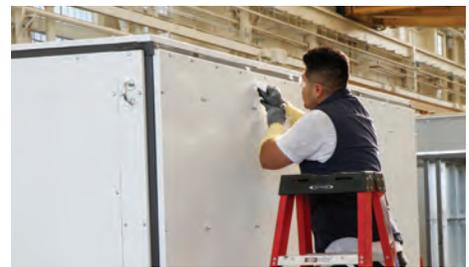


## EFFICIENT, CUSTOM MANUFACTURING

With advanced manufacturing equipment at our factories in Minneapolis and Sacramento, Innovent is well positioned to build the high quality, top performing air handling units you need — no matter how unique or demanding your performance and size requirements are. Our knowledgeable plant engineers and experienced craftspeople employ advanced manufacturing and assembly processes to create specialized custom units from 250 cfm to 250,000 cfm.

## CUSTOMER SERVICE EXCELLENCE

From the moment your project begins, our knowledgeable Innovent sales representatives in more than 65 locations around the U.S. and our highly-trained, friendly customer service team at the factory will work hard to ensure that you receive the unique, top performing air handling systems you require. We will listen carefully to your needs and special requests — and then use our extensive applications knowledge to create an air handling system just for you.



BUILT **TO ORDER.**  
BUILT **FOR EFFICIENCY.**  
BUILT **TO LAST.**



## CREATING EFFICIENT, RELIABLE **CUSTOM** **HVAC SOLUTIONS**

Innovent® Air Handling Equipment is a manufacturer of custom HVAC equipment used in a wide range of facilities including schools, hotels, hospitals, pools, manufacturing centers, and commercial buildings. Working with carefully-selected sales representatives, Innovent listens to the needs of designers, installers, and owners to develop custom solutions without the compromises of standard HVAC equipment.



*Headquarters in  
Minneapolis, MN*

For more information, contact  
your local representative or  
Innovent directly at:

60 28th Avenue North  
Minneapolis, MN 55411  
sales@innoventair.com

Phone 612.877.4800  
Fax 612.877.4801

**innoventair.com**



**Innovent**<sup>®</sup>  
*Air Handling Equipment*

BUILT **TO ORDER.**  
BUILT **FOR EFFICIENCY.**  
BUILT **TO LAST.**

**[innoventair.com](http://innoventair.com)**